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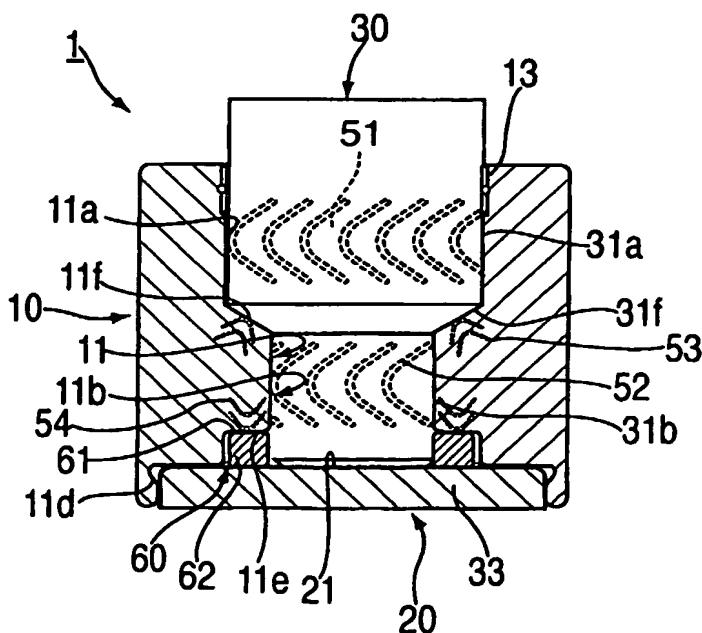
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(54) Title: FLUID DYNAMIC BEARING MECHANISM



(57) Abstract: A fluid dynamic bearing mechanism that can ensure bearing rigidity, reduce shaft loss torque, reduce power consumption, stabilize axial rotation, and improve rotational accuracy is disclosed. The fluid dynamic bearing mechanism being suitable for use in a hard disk drive. In the fluid dynamic bearing mechanism (equipped with a bearing case, endplate, and shaft) a cylindrical hole of the bearing case is changed to a stepped cylindrical hole that has a large diameter part and a small diameter part. The shaft is changed to a stepped shaft that has a large diameter part and a small diameter part. On the outer circumference of either the large diameter part of the stepped cylindrical hole, or the large diameter part of the stepped shaft, a first dynamic pressure groove is formed. On the outer circumference of the small diameter part of the stopped cylindrical hole or the small diameter part of the stepped shaft, a second dynamic pressure groove is being formed. On the surface of step part of the stepped cylindrical hole, the third dynamic pressure groove is formed. The small gaps that face each of the three dynamic pressure grooves are filled with a dynamic pressure generating lubricating oil.